

PATENT ABSTRACTS OF JAPAN

(11)Publication number : 2000-031387

(43)Date of publication of application : 28.01.2000

(51)Int.Cl.

H01L 27/04
H01L 21/822
H01G 4/33
H01L 21/316

(21)Application number : 10-198524

(71)Applicant : FUJI ELECTRIC CO LTD

(22)Date of filing : 14.07.1998

(72)Inventor : KATO HISATO
KUSAKAWA KAZUHIRO
KAWAMURA YUKINORI

(54) MANUFACTURE OF DIELECTRIC THIN FILM CAPACITOR

(57)Abstract:

PROBLEM TO BE SOLVED: To provide a manufacturing method of a small-sized dielectric thin film capacitor having large capacitance and a high breakdown voltage.

SOLUTION: A titanium film 12 deposited by a sputtering method, and a lower part electrode composed of a platinum film 13 are formed on a silicon substrate 11. The surface of the electrode is roughened by a method like mechanical polishing. On the roughened surface, a dielectric film 14 of an ATO film formed by alternately laminating alumina and titania by an atomic layer epitaxy method is deposited. By depositing again a platinum film 15, an upper part electrode is formed.



LEGAL STATUS

[Date of request for examination]

[Date of sending the examiner's decision of rejection]

[Kind of final disposal of application other than the examiner's decision of rejection or application converted registration]

[Date of final disposal for application]

[Patent number]

[Date of registration]

[Number of appeal against examiner's decision of rejection]

[Date of requesting appeal against examiner's decision of rejection]

[Date of extinction of right]